DOCUMENT RESUME

ED 415 474 CG 028 251

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TITLE The BASC and TEMAS: Convergent Validity or Complementary Measures?
PUB DATE 1997-08-15
NOTE 21p.; Paper presented at the Annual Meeting of the American Psychological Association (105th, Chicago, IL, August 15-19, 1997).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Adolescents; Children; *Comparative Analysis; Construct Validity; Elementary Education; Evaluation Methods; *Personality Measures; *Test Validity
IDENTIFIERS *Behavior Assessment System for Children; *Tell Me A Story Test

ABSTRACT

Accurate personality assessment of youngsters is complex because thorough assessment involves much more than direct assessment of the child. To better understand this challenge, two omnibus instruments for child-personality assessment--the Tell-Me-A-Story (TEMAS) and the Behavior Assessment System for Children Self-Report of Personality (BASC SRP)--and how these two interact are described in this paper. To test these assessments, 124 youngsters (aged 5 years 10 months to 13 years 11 months) were administered the tests. The results indicate that there are some notable relationships in evidence among the two measures, although these may reflect the instruments' complementarity rather than convergent validity, seeing as the same/similarly-named scales of both tools assessed different constructs. Furthermore, the TEMAS Personality Functions were frequently found to bear inverse relationships to BASC Scales that assess clinical or school problems. Nevertheless, the data suggest a complementary relationship between the two measures, i.e., a projective measure developed to assess conflict resolution/social problem solving and an objective measure of personality. The findings show that TEMAS scores in the direction of greater difficultly are associated with higher BASC scores on scales that assess Clinical and School Maladjustment. The implications of these results are discussed. Contains 11 references. (RJM)

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ED 415 474

Running Head: CONVERGENT VALIDITY OF THE TEMAS AND BASC

The BASC and TEMAS: Convergent Validity or Complementary Measures?

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Presented at the 105th Annual Convention of the American Psychological Association at Chicago, August, 15, 1997, 3:00-3:50

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Abstract

This preliminary study examined the relationship between the TEMAS (Acronym for Tell-Me-A- Story, Costantino, Malgady, & Rogler, 1988) and the Behavior Assessment System for Children Self-Report of Personality (BASC SRP; Reynolds & Kamphaus, 1992). Data suggest a complementary relationship between two omnibus instruments: a projective measure developed to assess conflict resolution/social problem solving and an objective measure of personality. Results generally indicate that TEMAS scores in the direction of greater difficulty is associated with higher BASC scores on scales that assess Clinical and School Maladjustment. Similarly, TEMAS scores in the direction of greater adaptability and social problem solving skills seems related to better Personal Adjustment on the BASC. Practitioner implications and suggestions for further research are discussed.

The BASC and TEMAS: Convergent Validity or Complementary Measures?

Accurate personality assessment of youngsters is complex because thorough assessment involves much more than direct assessment of the child; the setting, context, and relationships with significant others and authority figures must also be assessed (Achenbach & Edelbrock, 1978, Reynolds & Kamphaus, 1992). Practitioners approach this task in myriad ways; there is no "standard" manner of proceeding. Surveys of test usage among school psychologists (Goh & Fuller, 1983; Hutton, Dubes & Muir, 1992; Kennedy, Faust, Willis, & Piotrowski, 1994) indicate that some prefer projective assessments. Mc Clelland, Koestner, and Weinberger (1990) provide data that indicate the best way to fully assess an individual is to use a combination of projective and objective assessments, as these tap the individual in clearly different ways.

Difficulty using projective assessments lies in both research and practice. One reason these instruments have fallen into disfavor is the psychometric base, which is poor by objective test standards (Martin, 1988). Some of the difficulty might be attributed to the lack of standardization with regard to administration, scoring (if any) and interpretation of these instruments. Adherents might argue that much of the strength of projective assessment lies in the interpretation, which means that the "psychometric" properties are a reflection of clinician skill. It is difficult, however, to teach the clinical judgment that guides the use of projectives (Vane & Guarnaccia, 1989), which suggests that not all practitioners will be equally competent in the use of such devices.

New instruments have been recently been developed that are "objective-projective", meaning that these are projective techniques that are administered in a standard manner, scored

and compared to normative data (Costantino, Malgady, & Rogler, 1988; Mc Arthur & Roberts, 1982). These new instruments, while offering standardization appearing to be an improvement over traditionally favored projective such as the Thematic Apperception Test (Murray, 1943), have not been widely accepted. Among the reasons for the reluctance appears to be concerns with psychometric properties; admittedly, these are not at the level of objective instruments. The purpose of the present investigation was to establish preliminary evidence of convergent validity of the TEMAS (acronym for Tell-Me -A- Story; Costantino, Malgady, & Rogler, 1988) and the Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 1992). Both are omnibus personality instruments, the TEMAS being a projective measure, and the BASC being an objective multi-rater system of assessment.

Method

Participants. One hundred twenty four youngsters aged 5-0 to 13-11 were administered the short form of the TEMAS (Costantino, Malgady, & Rogler, 1988) and the BASC (Reynolds & Kamphaus, 1992) as part of a larger study. As many forms of the BASC as could be collected for each participant in regard to age level and rater were obtained. This resulted in a subset of 96 youngsters (22 of whom were aged 12-0-13-11) from whom the TEMAS and BASC -Self Report of Personality (SRP) were obtained.

Participants came from various sources, constituting a convenience sample. No child was tested specifically to provide data for the study. Rather, the children were referred for comprehensive psychoeducational assessments or served as "practice" subjects for school psychology graduate students enrolled in a personality assessment course. This resulted in a sample that reflected urban and suburban schools, as well as socioeconomic and racial/ethnic

diversity. The investigation was managed as an archival study, with the accuracy of student scoring checked by the investigator, who is also the course instructor, and a teaching assistant. The investigator is also the school psychologist to whom the referrals were made.

Instruments. The TEMAS (Costantino, Malgady, & Rogler, 1988) is a projective story-telling test specifically developed for children and adolescents. The lack of suitable instruments for the assessment of racial/ethnic minorities was a driving force behind the development of the TEMAS. A unique feature is that the respondent is required to address a conflict/solve a problem. The 23 stimulus cards are available in minority and nonminority versions, with some gender-specific cards. The situations were developed to tap problem-solving in particular domains. Each domain is tapped by some of the stimulus cards. The TEMAS is normed for youngsters aged 5-13, for four racial/ethnic groups: White, Black, Puerto Rican and Other Hispanic. The short-form, believed by the authors to be adequate for most clinical purposes, consists of nine cards. Stories are scored on Qualitative and Quantitative Scales that are called Functions. There are three types of functions: Personality, Affective and Cognitive. Personality Functions include: Achievement Motivation, Aggression, Anxiety/Depression, Delay of Gratification , Interpersonal Relations, Moral Judgment, Reality Testing, Self-Esteem, and Sexual Identity. Examples of Affective Functions include Happy, Sad, Angry, Fearful. Examples of Cognitive Functions are Reaction Time, and Fluency (word count). Stories are scored on a 4-point Likert scale, with higher scores indicating more adaptive responses. Functions that the stimulus cards depict, but are not responded tp are scored as "not pulled". Thus, the TEMAS provides an assessment of the potential adaptive-social skills in a child's repertoire. Data are reported as T scores ($\underline{X}$=50, $\underline{SD}$=10). Standardization was on a sample of over 600 youngsters from Brooklyn, New York.

Criticisms of the TEMAS include the restricted norm sample, variable quality of psychometric properties across scales, and a research base that is generally limited to investigations by the test developers.

The BASC (Reynolds & Kamphaus, 1992) is a multidimensional, multi-method means of evaluating the behavior and self-ratings of youngsters aged 4-18. The instrument consists of Parent and Teacher Rating Scales, a Self-Report of Personality, a Structured Developmental History and Student Observation System. The components may be used alone or in any combination. Scores are reported as T scores ($\underline{X}$=50, $\underline{SD}$=10). The Self-Report of Personality for Children (SRP-C) of the BASC, developed for youngsters aged 8-11, consists of 12 Scales (Anxiety, Atypicality, Locus of Control, Social Stress, Attitude to School, Attitude to Teachers, Depression, Sense of Inadequacy, Relations with Parents, Interpersonal Relations, Self-Esteem and Self-Reliance), most of which are grouped into three Composites labeled Clinical Maladjustment, School Maladjustment and Personal Adjustment. Adolescents also rate themselves on Sensation Seeking, which is part of the School Maladjustment Composite. There is also a global index of emotional difficulty, the Emotional Symptoms Index (ESI), which has been linked to the special education categories of Emotional and Behavioral Disturbance, as well as some DSM-III-R (American Psychiatric Association, 1987) diagnoses. Norms are available for a General (nonclinical) sample and for a Clinical sample. A significant asset of the BASC is that the scales are uniformly operationalized across raters and age levels. In the opinion of reviewers (Flanagan, 1995; Sandoval & Echandia, 1994), the BASC is believed to exhibit exemplary standardization and psychometric properties.

Results

Data in Table 1 indicate that this sample is less well adjusted, as assessed by the TEMAS

Insert Table 1 about here

Personality Functions, than the standardization sample. BASC scores are reported in Table 2.

Insert Table 2 about here

These data, however, indicate that the sample is similar to the standardization sample. Some statistically significant relationships between TEMAS Personality Functions and the BASC Scales and Composites are in evidence.

Data in Table 3 indicate that stronger Reality Testing, as assessed by the TEMAS, is inversely associated with the BASC measure of Clinical Maladjustment (r=-.207; p, 05), and one

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Insert Table 3 about here

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of its components, the Atypicality Scale (r=-.228; $p<.05$). This may further suggest that these two measures are tapping similar constructs. Conversely, tabled data suggest that Anxiety as measured on the BASC and Anxiety/Depression measured by the TEMAS clearly assess different constructs (r= 066).

The BASC Scales that assess Depression and Sense of Inadequacy (Table 4) are inversely related to, or show small positive correlations with TEMAS Personality Functions.

Insert Table 4 about here.

While most correlations are in the expected directions, only one reached statistical significance: Reality Testing with Sense of Inadequacy (r=-.221; p<.05).

The correlations of the TEMAS Personality Functions and the Emotional Symptoms Index of the BASC SRP are shown in Table 5. Data indicate weak relationships between most scales,

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Insert Table 5 about here.

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with the exception of Reality Testing (-.228; p<.05).

Data in Table 6 indicate that, as expected, the School Maladjustment Composite and its component scales, tend to be inversely related to TEMAS Personality Functions. Of the tabled

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Insert Table 6 about here.

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data, significant correlations emerged for the TEMAS Aggression Function with both Attitude to School and the School Maladjustment Composite (r=-.229; p<.05 and r=-.242; p<.05, respectively). The TEMAS Functions for Reality Testing, Self-Concept and Delay of Gratification all correlated inversely with the School Maladjustment Composite and each of its components. Of these correlations, one is significant: Reality Testing with the School Maladjustment Composite (r=.256; p<.05).

The correlations between the TEMAS Personal Adjustment Composite and its component Scales are shown in Table 7. These data indicate positive and negative correlations, some of

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Insert Table 7 about here.

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which are significant. The TEMAS Functions Aggression and Anxiety /Depression are inversely related to the Self-Esteem Scale of the BASC (r=-.240; $p<.05$ and r=-.189; $p<.05$, respectively). Reality Testing is positively related to Self-Reliance (r= 239; $p<.05$). Self-Esteem (BASC) and Self-Concept (TEMAS) appear to assess different constructs (r=-.023). The Interpersonal Relations measures of both instruments are weakly related (r= 037), and most likely reflecting different constructs.

Discussion

This study provides some preliminary data on the relationship of the TEMAS and the BASC. Data generally indicate that there are some notable relationships in evidence, although these may reflect the complementarity of the instruments rather than convergent validity. The strongest evidence for this notion comes from the fact that same/similarly-named scales were consistently found to assess different constructs. Also apparent, however, is TEMAS Personality Functions were frequently found to bear inverse relationships to BASC Scales that assess clinical or school problems, but positively related to the Personal Adjustment Composite and component scales of the BASC. This general inference is expected, as *lower* T scores on the TEMAS indicate poorer ability to cope with conflict/solve problems. The significant inverse relationships that emerged between component scales of the Personal Adjustment Composite and TEMAS

Personality Functions appear anomalous. Clinical interpretation, however, might suggest that many youngsters have difficulty coping with aggression, anxiety and depression and have difficulty delaying gratification. Within that conceptualization, the data seem more reflective of children's coping skills rather that some degree of dysfunction.

The data are also consistent with the conceptualization of implicit and self-attributed motives in personality (Mc Clelland, Koestener, & Weinberger, 1990). Their data indicated that projectives tap implicit motives, which are believed to be what is extracted from impressionistic clinical interpretation, while objective personality measures provide data on self-attributed motives - that which the client more readily offers. A critical point of that article is that both types of assessment are needed in order to obtain a full assessment of personality. Such a notion makes sense from a treatment planning standpoint, as information about one's problem-solving abilities and internal resources would be expected to impact upon recommendations made.

There are limitations with this study. These are clearly preliminary data. There are sampling difficulties, as sampling was not random. Adjustment may be required because multiple statistical tests were performed. Sample sizes are uneven. This occurred because some children gave TEMAS responses that resulted in scoring "not pulled" for a particular personality function. It is not unusual for youngsters to choose not to address certain conflicts that are clearly depicted by the TEMAS stimulus cards. From a clinical viewpoint, this would suggest some level of difficulty, whether it be perceived poor coping skills or dysfunction. Attenuation of the correlations needs to be considered, as the TEMAS authors indicated in the manual that some of the reliability data may have been artificially reduced because of attenuation.

The complementarity of the instruments is consistent with clinical observation/experience,

as data obtained on a per case basis is often integrated readily to obtain a picture of the child being evaluated. The ease of integration tends to make report writing somewhat less laborious.

Future studies should examine the relationship of the Parent and Teacher Rating Scales of the BASC with the TEMAS. The remainder of the TEMAS scales - the Affective and Cognitive Functions and Personality Functions "not pulled" also merit examination in relation to the BASC. Sampling and statistical issues need to be more carefully planned, such that there can be more confidence in the data obtained.

Table 1

Means, Standard Deviations and Ranges for the TEMAS Personality Functions

TEMAS Variable	N	Mean	S.D.
Aggression	123	40.03	12.59
Interpersonal Relations	124	45.73	10.88
Achievement Motivation	124	46.60	12.65
Anxiety/Depression	123	42.90	13.32
Reality Testing	124	48.75	12.06
Delay of Gratification	117	46.40	12.36
Self-Concept	114	47.07	9.36
Sexual Identity	106	47.16	10.66
Moral Judgment	119	42.08	11.57

Table 2

Means, Standard Deviations and Ranges for BASC SRP-C Scales and Composites

BASC Scale	N	Mean	S.D.
Anxiety	94	49.87	10.33
Atypicality	96	47.25	9.91
Social Stress	96	47.70	9.96
Locus of Control	96	48.55	8.89
Somatization	22	47.27	7.49
Clinical Maladjustment	95	47.75	9.38
Sensation Seeking	22	46.32	9.78
Attitude to Teacher	95	48.18	9.02
School Maladjustment	97	48.84	8.66
Self-Esteem	96	51.23	8.53
Self-Reliance	96	51.03	9.06
Relations with Parents	96	50.72	9.08
Interpersonal Relations	96	51.41	10.34
Personal Adjustment	95	50.72	9.40
Sense of Inadequacy	96	49.87	10.45
Depression	96	49.61	8.77
Emotional Symptoms Index	95	48.73	9.84

Table 3

Correlation Between the TEMAS Personality Functions and the BASC SRP-C Clinical Maladjustment Composite and Component Scales

TEMAS Scale	Clinical Maladjustment Scales				
	Anxiety	Locus of Control	Social Stress	Atypicality	Composite
Achievement Motivation	.111	-.032	-.019	-.027	.538
Aggression	.052	-.034	.007	-.038	-.014
Anxiety/ Depression	.066	.116	-.005	.051	.101
Moral Judgment	.083	-.068	.032	.034	.032
Interpersonal Relations	.065	-.134	-.036	.134	.039
Sexual Iden	.013	-.032	-.029	-.001	.028
Reality Test	-.148	-.101	-.198	-.228*(N=96)	-.207*(N=95)
Self-Concept	.143	.062	.040	.032	.097
Delay of Gratification	.178	.029	.027	.120	.140

*p< .05,**p< .01

Table 4

Correlation Between the TEMAS Personality Functions and the Depression and Sense of Inadequacy Scales of the BASC SRP-C

TEMAS Variable	Depression	Sense of Inadequacy
Achievement Motivation	-.080	-.043
Aggression	.001	-.052
Anxiety/Depression	-.034	-.035
Moral Judgment	.004	.062
Interpersonal Relations	-.061	-.035
Sexual Identity	-.108	-.140
Reality Testing	-.171	-.221*(N=95)
Self-Concept	.011	-.011
Delay of Gratification	-.143	-.035

*p< .05, **p< .01

Table 5

Correlations Between the TEMAS Personality Functions and the Emotional Symptoms Index of the BASC SRP

TEMAS Variable	ESI
Aggression	042
Interpersonal Relations	012
Achievement Motivation	- 037
Anxiety/Depression	047
Reality Testing	- 228*(N=94)
Delay of Gratification	018
Self-Concept	026
Sexual Identity	- 098
Moral Judgment	074

*p< 05, **p< 01

Table 6

Correlation Between the TEMAS Personality Functions and the BASC SRP-C School Maladjustment Composite and Component Scales

TEMAS Scale	School Maladjustment Scales and Composite			
	Attitude to School	Attitude to Teacher	Sensation Seeking	Composite
Achievement Motivation	-.010	-.135	-.029	-.138
Aggression	-.229*(N=95)	-.134	.157	-.242*(N=93)
Anxiety/ Depression	-.041	-.095	.117	-.099
Moral Judgment	.033	.057	.244	.058
Interpersonal Relations	-.017	-.062	-.137	-.065
Sexual Identity	.003	-.081	.082	-.024
Reality Testing	-.166	-.248*(N=94)	-.148	-.256*(N=93)
Self-Concept	-.104	-.144	-.005	-.095
Delay of Gratification	-.001	-.010	-.088	.015

*p< .05, **p< .01

Table 7

Correlation Between the TEMAS Personality Functions and the BASC SRP-C Personal Adjustment Composite and Component Scales

TEMAS Scale	Personal Adjustment Scales				
	Relations With Parents	Interpersonal Relations	Self-Esteem	Self-Reliance	Composite
Achievement Motivation	.044	.136	-.016	.230*(N=96)	.087
Aggression	.019	.031	-.240*(N=95)	.118	-.042
Anxiety/ Depression	.038	-.202	-.189	.131	-.066
Moral Judg	.046	-.050	.004	-.004	-.031
Interpersonal Relations	.116	.037	-.090	.121	.033
Sexual Id	.120	-.018	.053	.043	.100
Reality Test	.189	.195	.097	.239*(N=95)	.197
Self-Concept	.008	.008	-.023	.045	.033
Delay of Gratification	.111	.087	-.056	.180	.072

*p< .05, **p< .01

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